

FACTORS AFFECTS TOWARD THE STRESS LEVEL AMONG 1st & 2nd YEAR PHYSICAL SCIENCE & ISMF STUDENTS



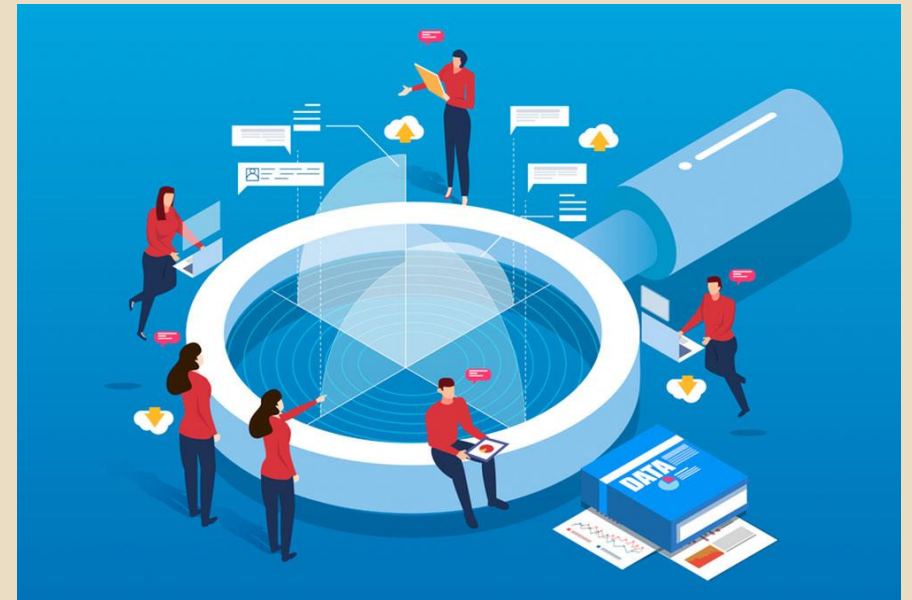
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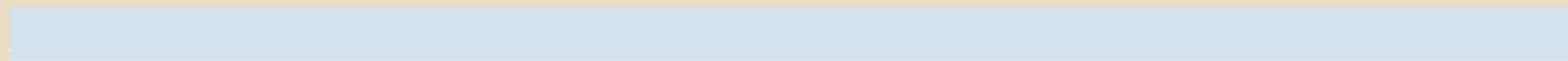
➤ INTRODUCTION

- University life is often characterized by academic pressures, social transitions, and increased responsibilities. All of this can contribute to heightened stress levels among students. Recognizing the importance of understanding and addressing these challenges, this study aimed to explore the factors influencing stress among university students.



➤ RESEARCH QUESTION

What are the reasons that are affected towards the stress levels among 1st year & 2nd year Physical Science and ISMF students?



➤ OBJECTIVES

1. Identify Demographic Influences on Stress
2. evaluate Academic Stress Factors
3. Assess Lifestyle and Financial Influences
4. Explore Extracurricular Activity and Social Connections
5. Assess Awareness & Utilization Support Services



➤ SAMPLING DESIGN

- Target Population: 1st year & 2nd year Physical Science and ISMF students in University of Colombo.
- Sampled Population: The set of students who have filled the given online questionnaire.
- Sampling Technique: Simple Random Sampling
- Sampling Unit: A student who have filled the online questionnaire.
- Sampling Frame: List of all 1st year and 2nd year students enrolled in physical science & ISMF programs at University of Colombo.



➤ MODE OF DATA COLLECTION

- Mode of data collection: Through online questionnaire (Google Form)
- Questionnaire (link)

https://docs.google.com/forms/d/e/1FAIpQLScdKxnwae4RFJ7BFx0VIFN9OwR1wfz8Em5X9TW0C9uKkYnDHQ/viewform?usp=pp_url

○ Variables of the Study:

- Gender
- Academic year
- Subject stream
- Factors that affects towards the stress level due to academics
- Hours per day spend on self-study
- Satisfaction level about the financial support from family or guardians
- Employment Status
- Average Spending on Basic Needs (food, clothing, shelter)
- Frequency of Quality Conversations with Loved Ones
- Involvement in any extracurricular activities
- Average Time Spent on Extracurricular Activities
- Awareness of counselling services provide by the university

- Derived variables: PSS score (perceived stress scale)
Stress Level

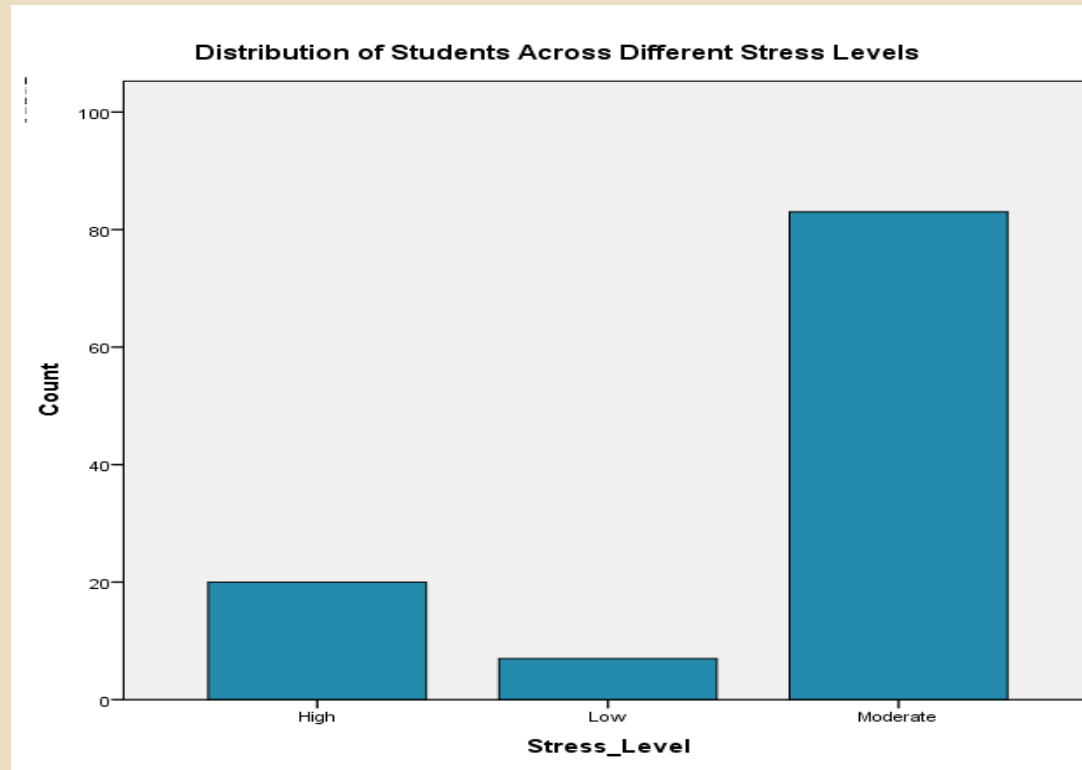
Figuring Your PSS Score

You can determine your PSS score by following these directions:

- First, reverse your scores for questions 4, 5, 7, and 8. On these 4 questions, change the scores like this:
$$0 = 4, 1 = 3, 2 = 2, 3 = 1, 4 = 0.$$
- Now add up your scores for each item to get a total. **My total score is _____.**
- Individual scores on the PSS can range from 0 to 40 with higher scores indicating higher perceived stress.
 - ▶ Scores ranging from 0-13 would be considered low stress.
 - ▶ Scores ranging from 14-26 would be considered moderate stress.
 - ▶ Scores ranging from 27-40 would be considered high perceived stress.

ANALYSIS

❖ Overall distribution of students across different stress levels

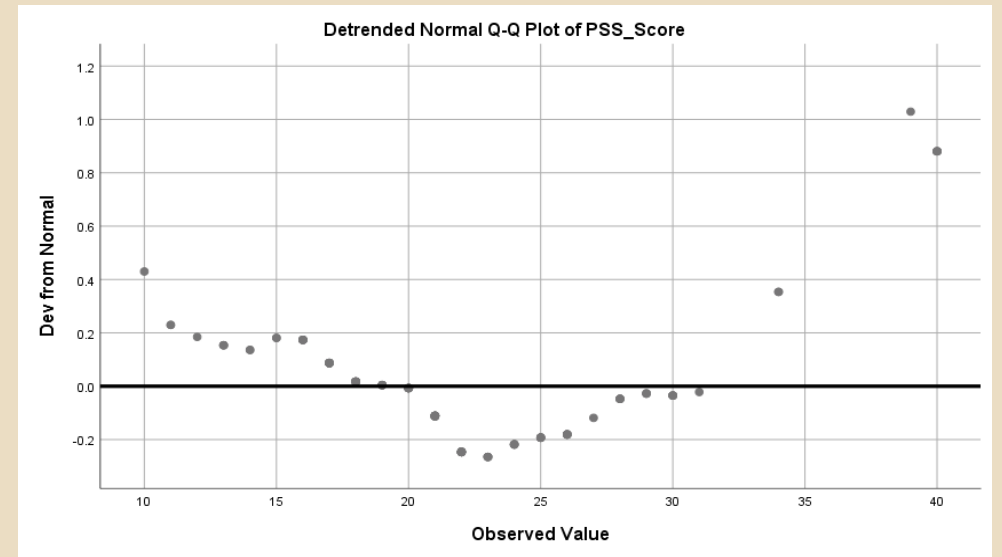


❖ Test Normality

H0 :The data follows a normal distribution

H1 :The data doesn't follows a normal distribution

Tests of Normality						
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
PSS_Score	.148	110	.000	.935	110	.000
a. Lilliefors Significance Correction						

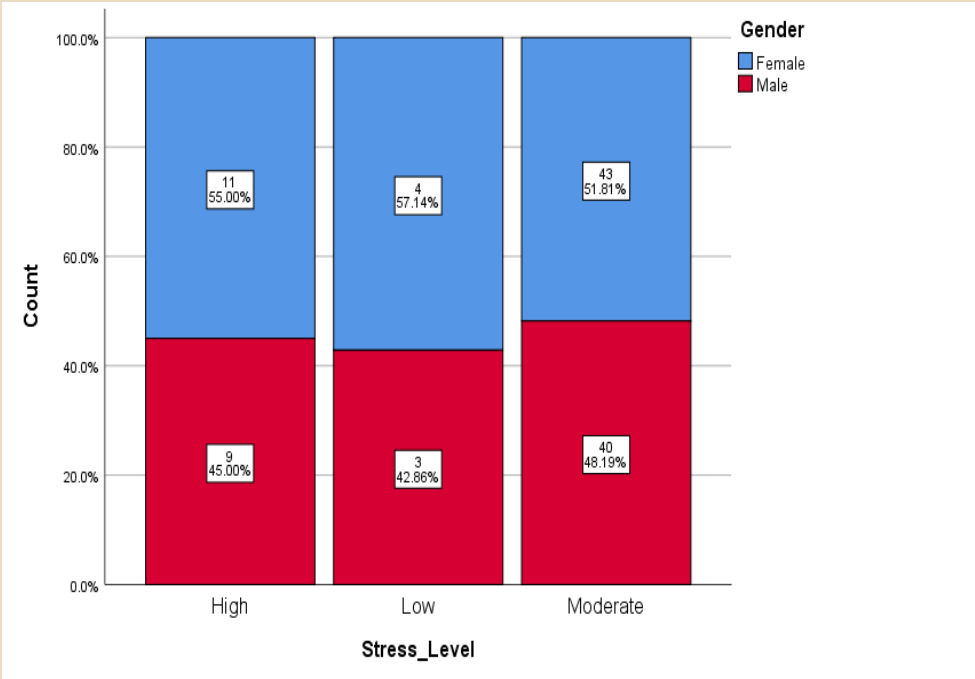


01. Identify Demographic Influences on Stress

❑ Exploring the association between stress levels and Gender of a student

H_0 : There is no association between the stress level and the Gender of a student

H_1 : There is an association between the stress level and Gender of a student

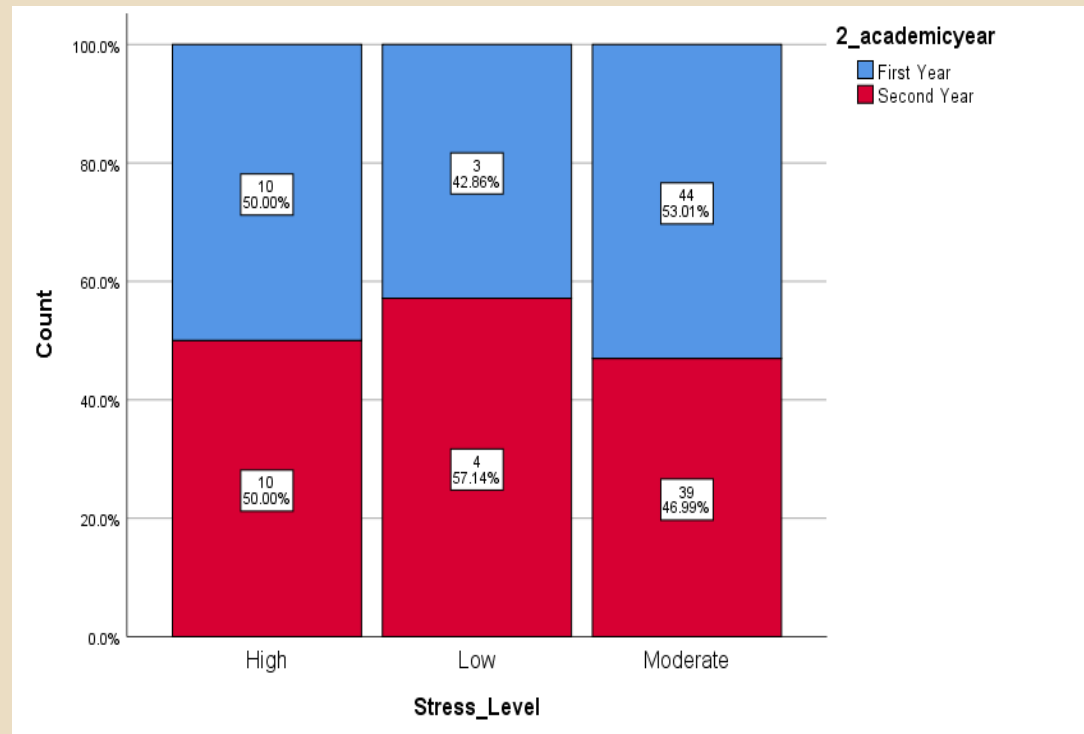


Chi-Square Tests				
	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	.124 ^a	2	.940	.944
Likelihood Ratio	.125	2	.940	.944
Fisher's Exact Test	.202			1.000
N of Valid Cases	110			
a. 2 cells (33.3%) have expected count less than 5. The minimum expected count is 3.31.				

❏ Exploring the association between stress levels and academic year of a student

H0: There is no association between the stress level and Academic Year of a student

H1: There is an association between the stress level and Academic Year of a student

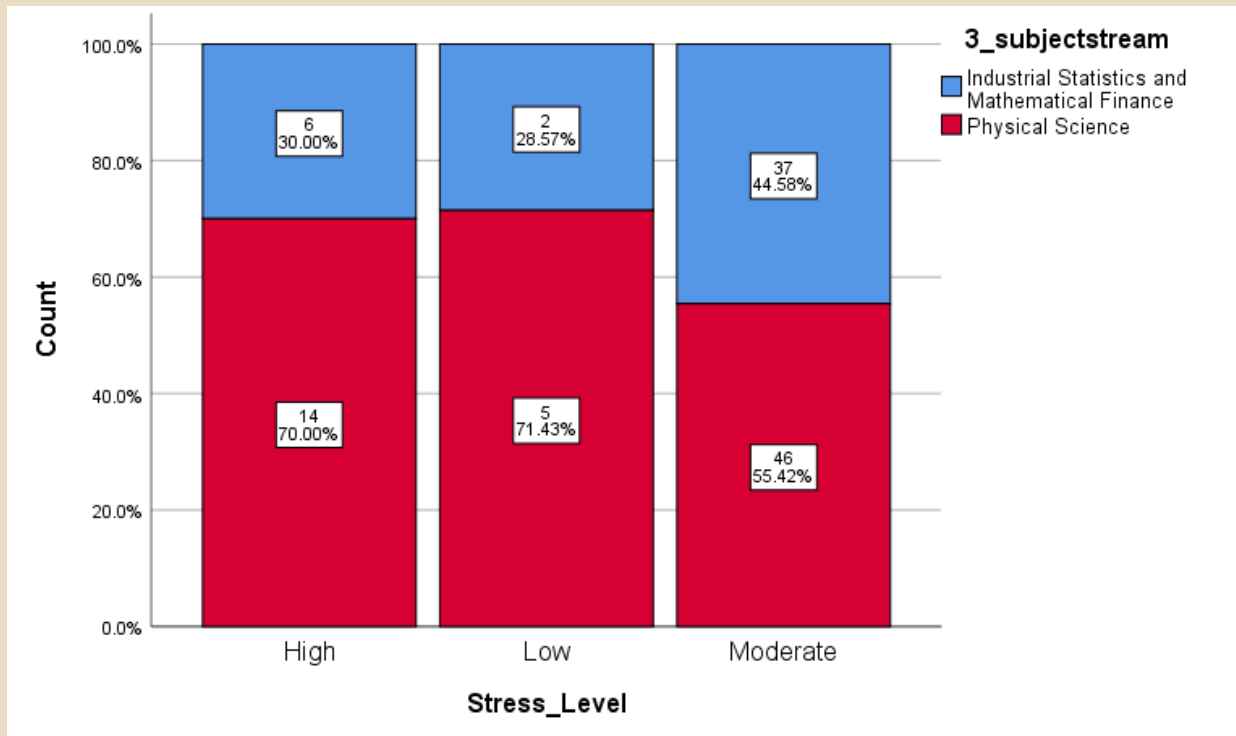


Chi-Square Tests				
	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	.124 ^a	2	.940	.944
Likelihood Ratio	.125	2	.940	.944
Fisher's Exact Test	.202			1.000
N of Valid Cases	110			
a. 2 cells (33.3%) have expected count less than 5. The minimum expected count is 3.31.				

❑ Exploring the association between stress levels and subject stream of a student

H0: There is no association between the stress level and subject stream of a student

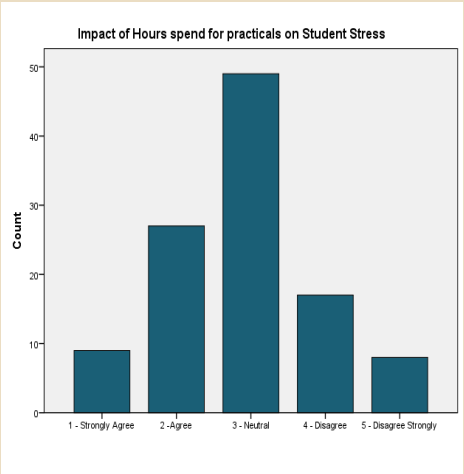
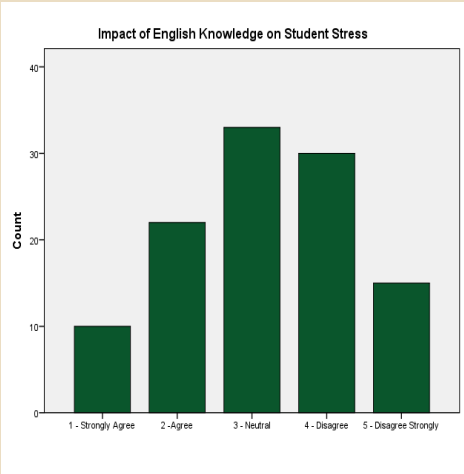
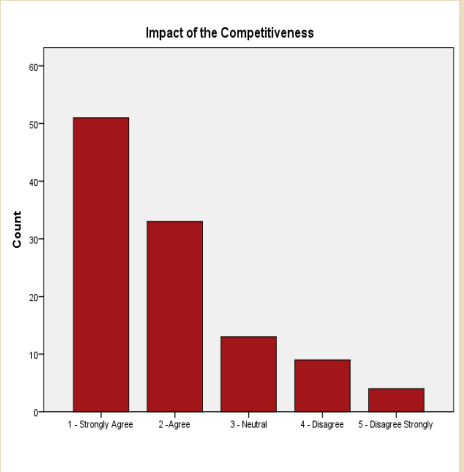
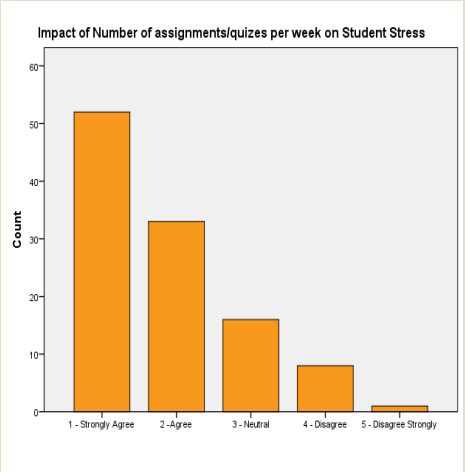
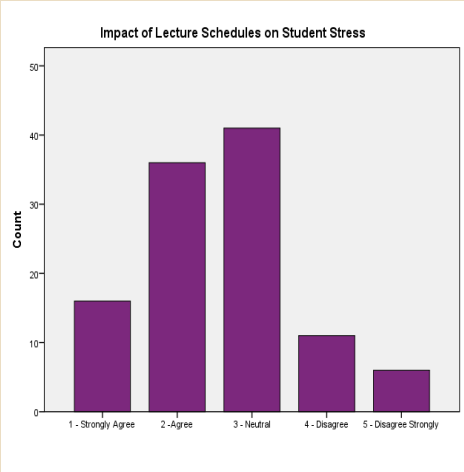
H1: There is an association between the stress level and subject stream of a student



Chi-Square Tests				
	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	1.888 ^a	2	.389	.421
Likelihood Ratio	1.941	2	.379	.421
Fisher's Exact Test	1.777			.471
N of Valid Cases	110			
a. 2 cells (33.3%) have expected count less than 5. The minimum expected count is 2.86.				

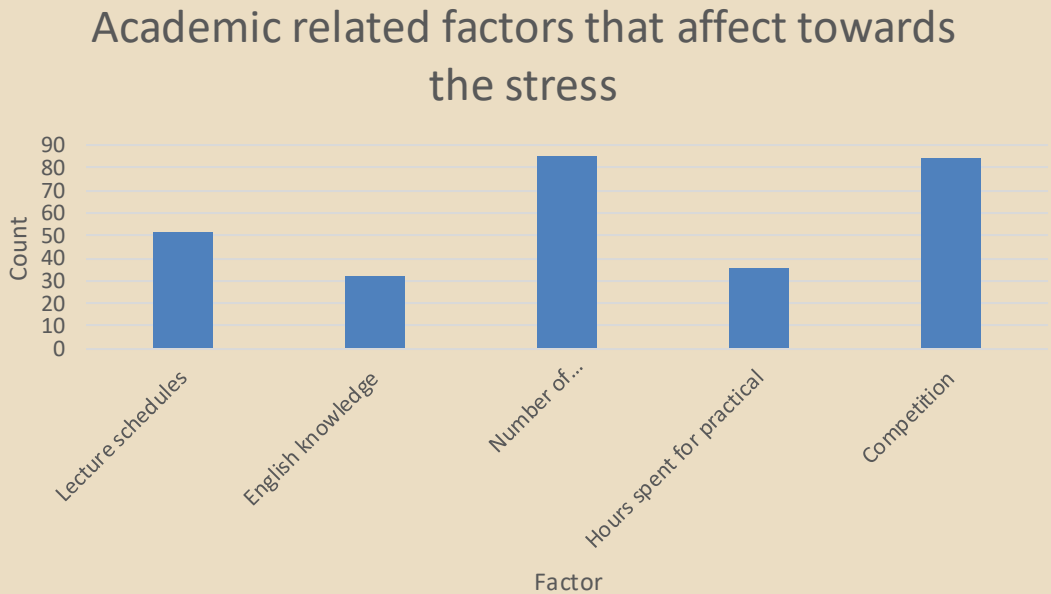
02. Evaluate Academic Stress Factors

Examining the Impact of Academic-Related Factors on Student Stress



☐ Number of student that agree and strongly agree that the relevant factor is affect to the stress level

	Frequency
Lecture schedules	52
English knowledge	32
Number of assignments/quizzes per week	85
Hours spent for practical	36
Competition	84

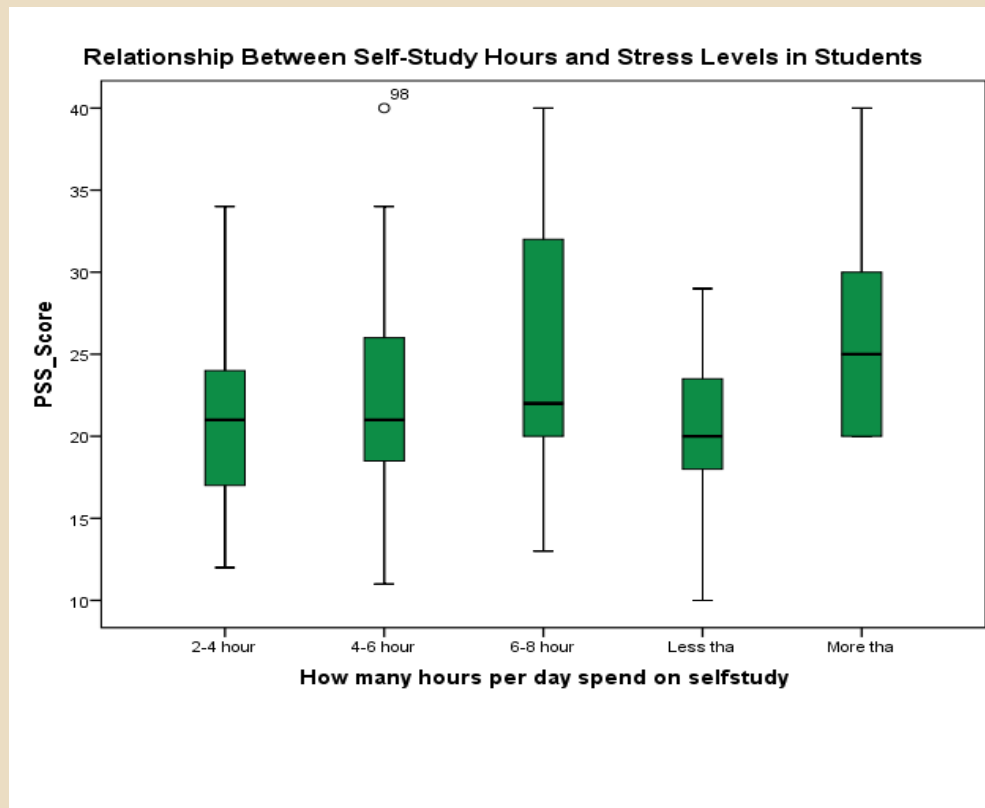


03.Access lifestyle and financial influences

❑ Relationship Between Self-Study Hours and Stress Levels in Students

H0: There is no difference in location between each level of self-study Hours

H1: There is a difference in location in one or more level of self-study Hours



Nonparametric Tests

Hypothesis Test Summary

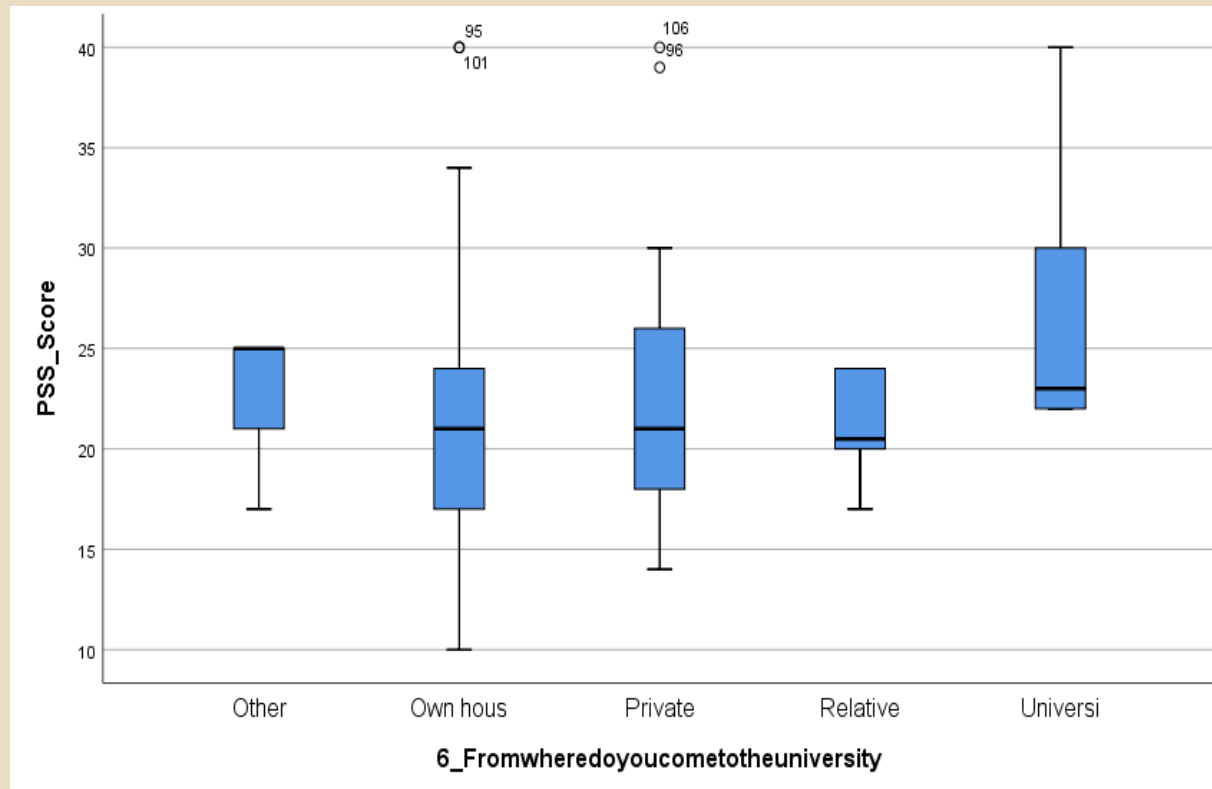
	Null Hypothesis	Test	Sig.	Decision
1	The distribution of PSS_Score is the same across categories of Howmanyhoursperdaydoyouspendo nforselfstudy.	Independent-Samples Kruskal-Wallis Test	.363	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

❑ Relationship Between Living place and Stress Levels in Students

H0: There is no difference in location between each Living place of a student.

H1: There is a difference in location in one or more Living places.



Nonparametric Tests

Hypothesis Test Summary

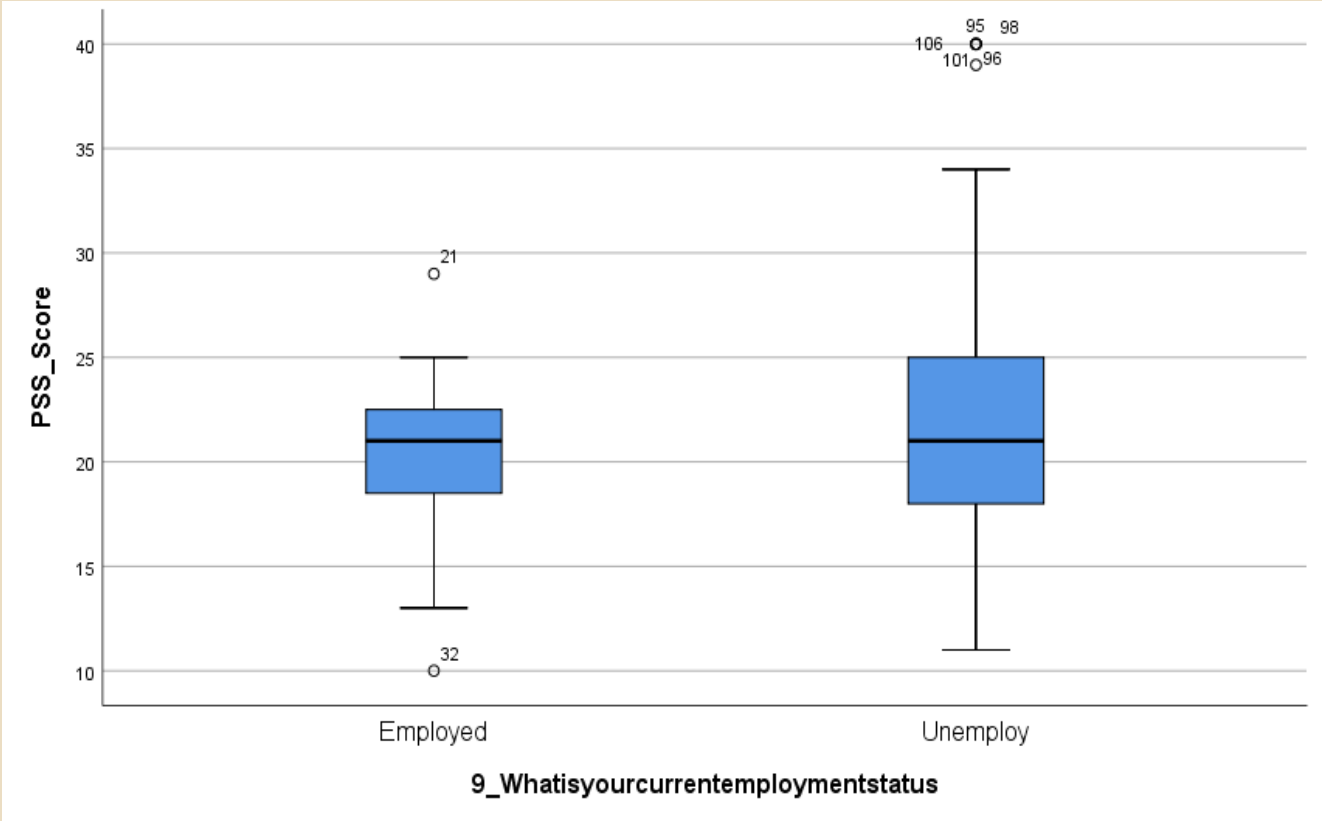
	Null Hypothesis	Test	Sig.	Decision
1	The distribution of PSS_Score is the same across categories of Fromwheredoyoucometotheuniversit y.	Independent-Samples Kruskal-Wallis Test	.266	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

❑ Impact of Employment Status on Student Stress

H0: There is no difference in location between the each Employment Status of a student

H1: There is a difference between the locations in Employment Status of a student

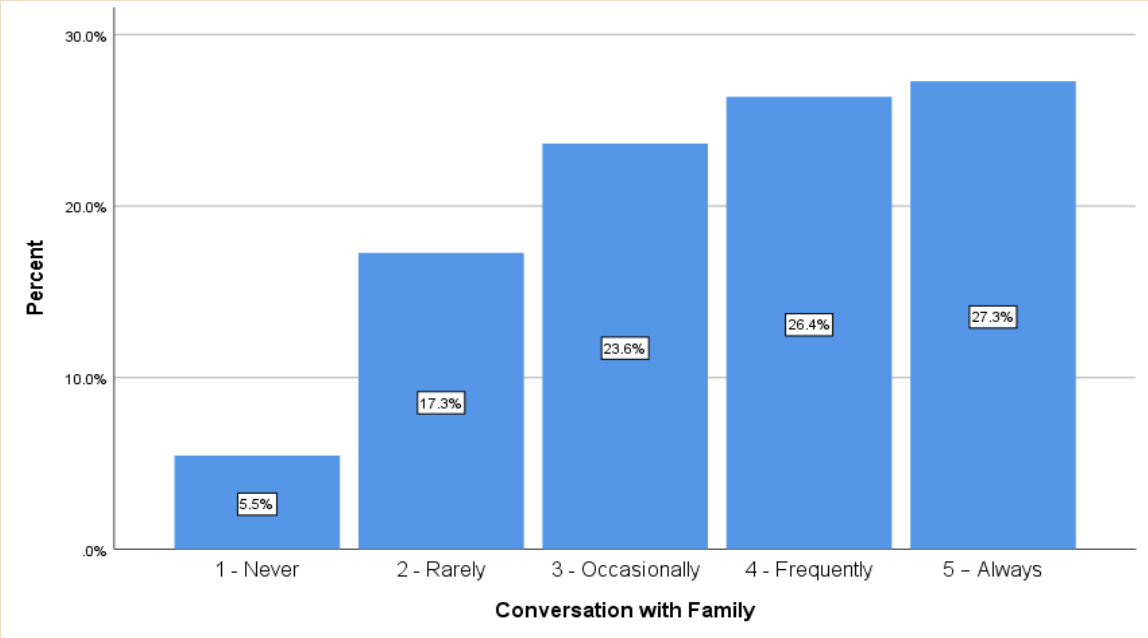


Hypothesis Test Summary				
	Null Hypothesis	Test	Sig.	Decision
1	The distribution of PSS_Score is the same across categories of NewE.	Independent-Samples Mann-Whitney U Test	.542	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

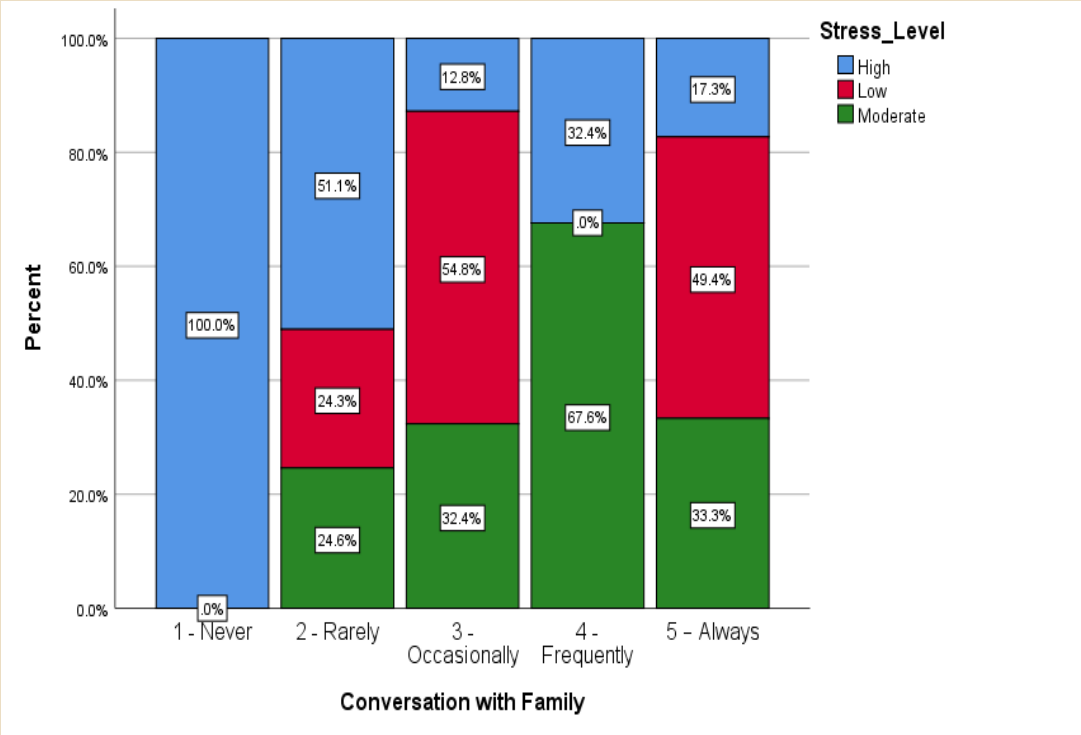
04.Explore Extracurricular Activity and Social Connections

☐ Quality conversation with family

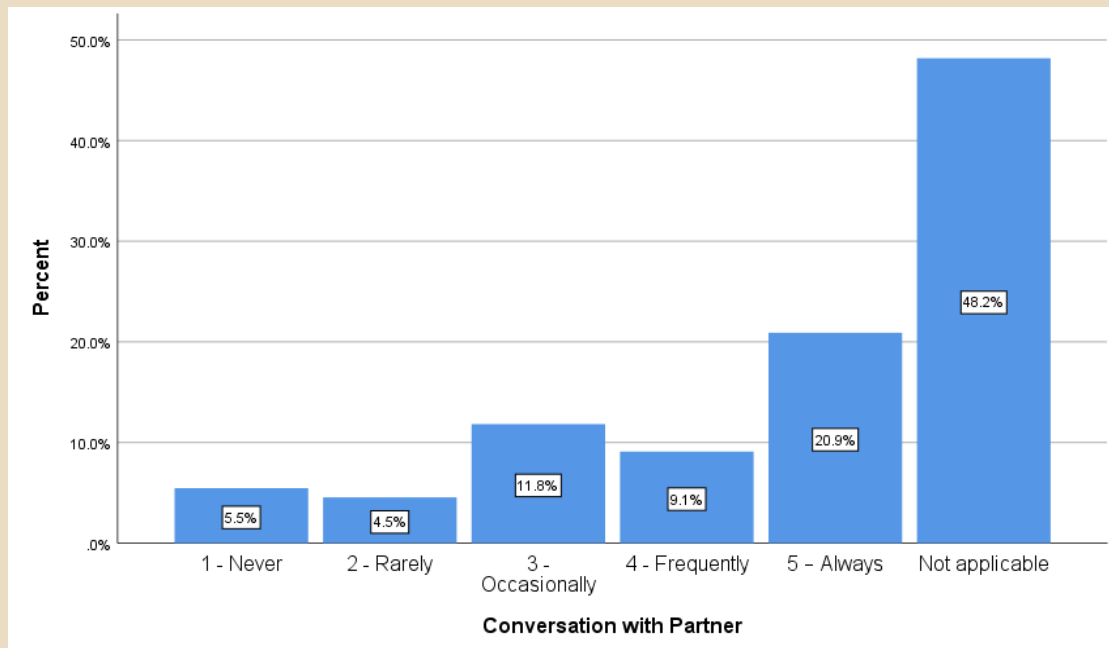


Chi-Square Tests				
	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	37.468 ^a	8	.000	.000
Likelihood Ratio	32.937	8	.000	.000
Fisher's Exact Test	27.947			.000
N of Valid Cases	110			

a. 9 cells (60.0%) have expected count less than 5. The minimum expected count is .38.

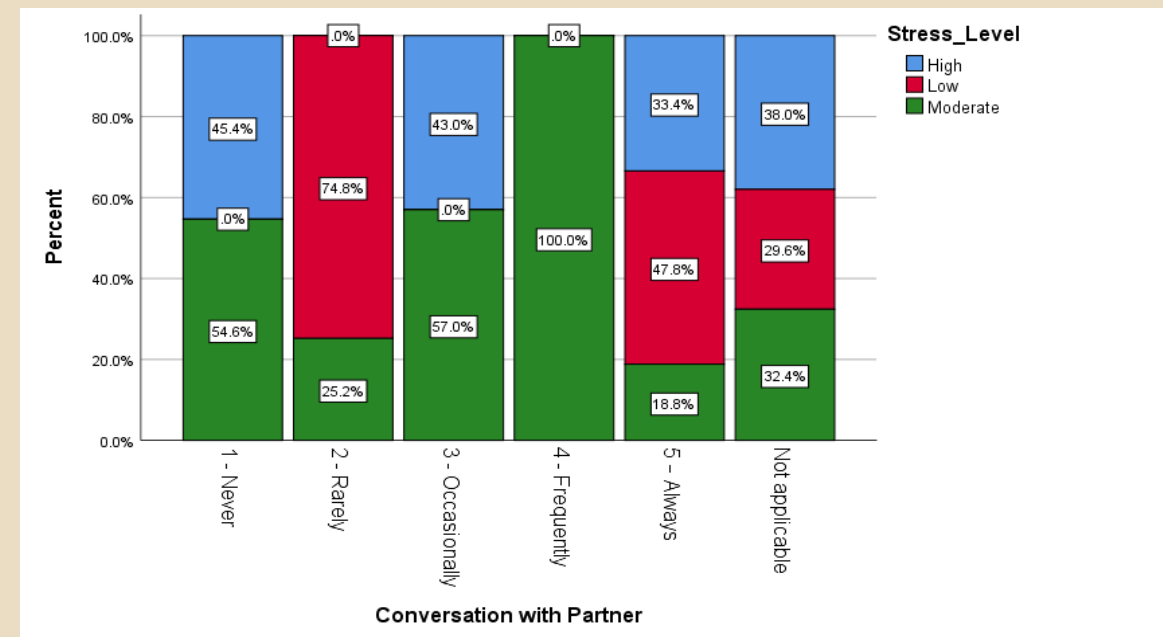


☐ Quality conversation with partner

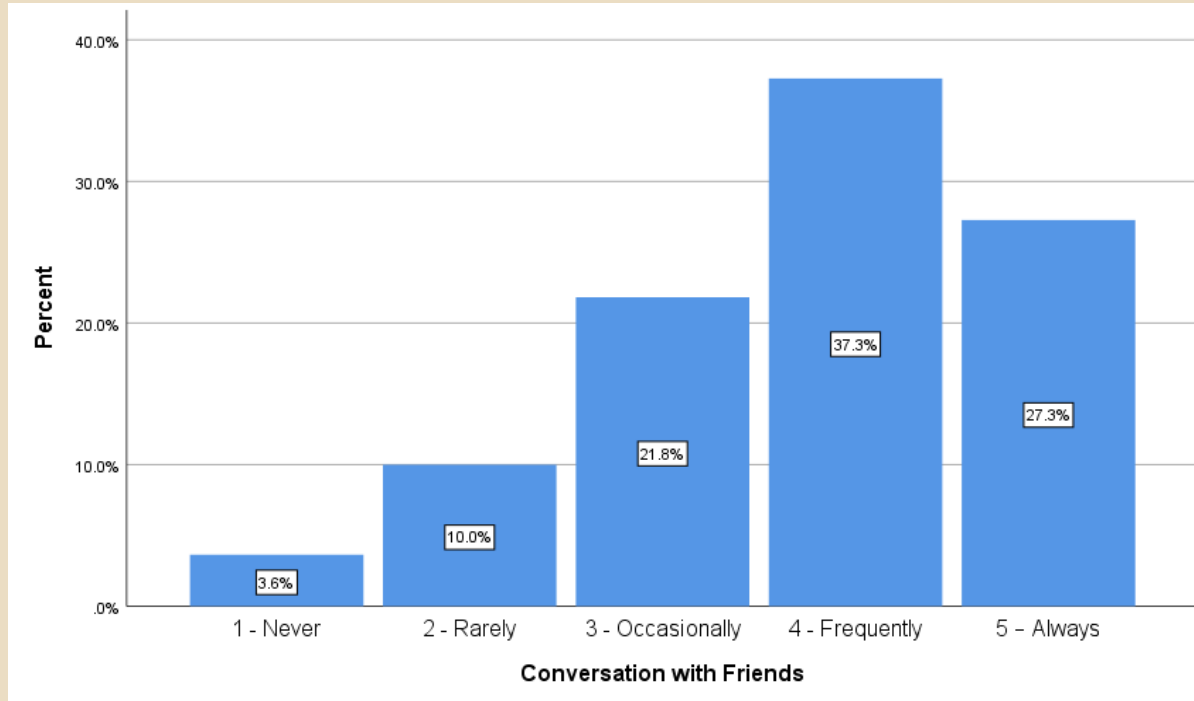


Chi-Square Tests				
	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	10.414 ^a	10	.405	.387
Likelihood Ratio	13.939	10	.176	.228
Fisher's Exact Test	8.700			.459
N of Valid Cases	110			

a. 13 cells (72.2%) have expected count less than 5. The minimum expected count is .32.

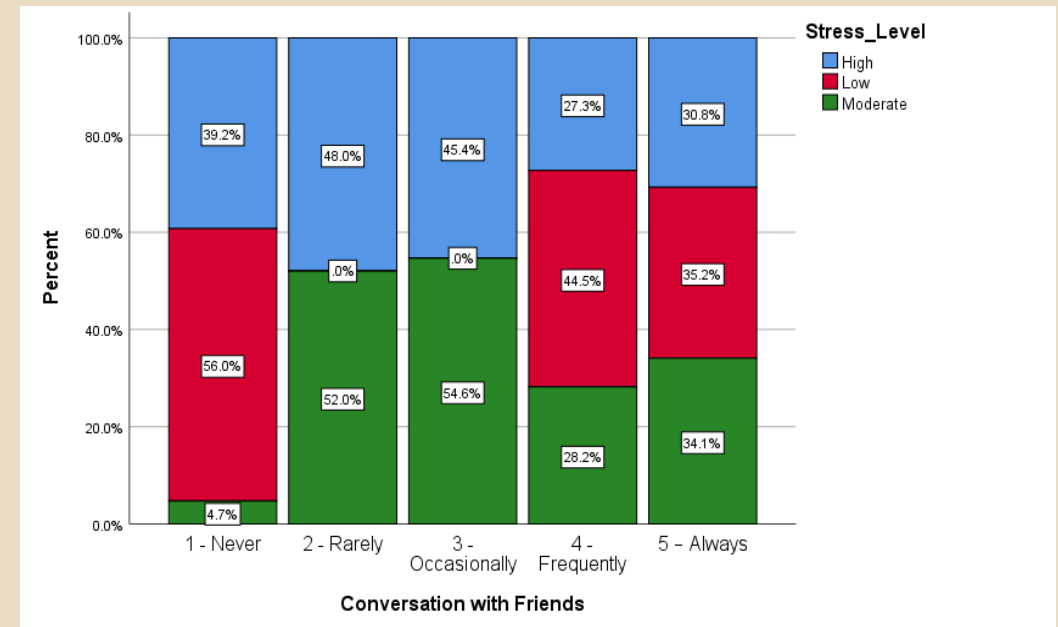


☐ Quality conversation with friends

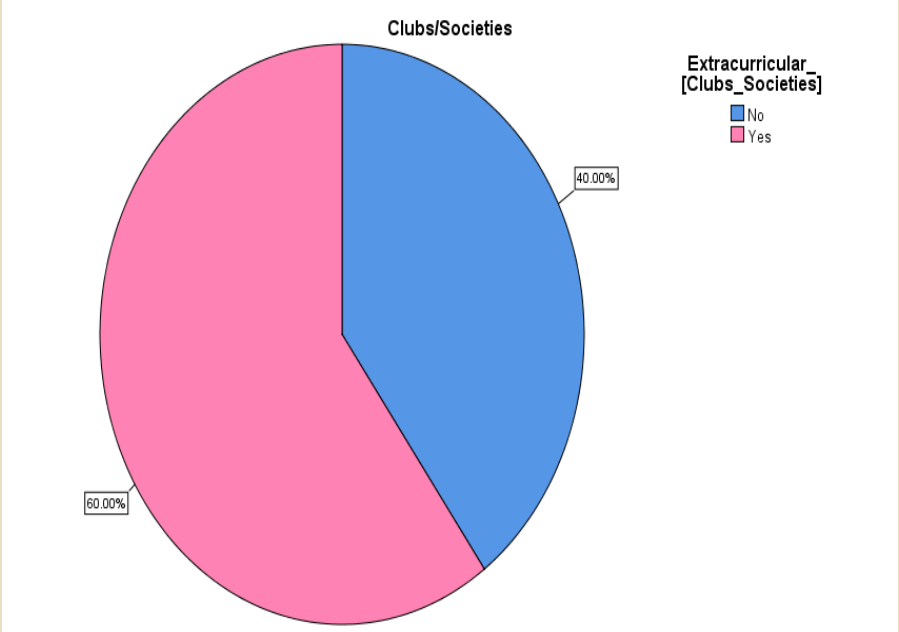


Chi-Square Tests				
	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	9.120 ^a	8	.332	.316
Likelihood Ratio	10.050	8	.262	.331
Fisher's Exact Test	8.632			.301
N of Valid Cases	110			

a. 9 cells (60.0%) have expected count less than 5. The minimum expected count is .25.

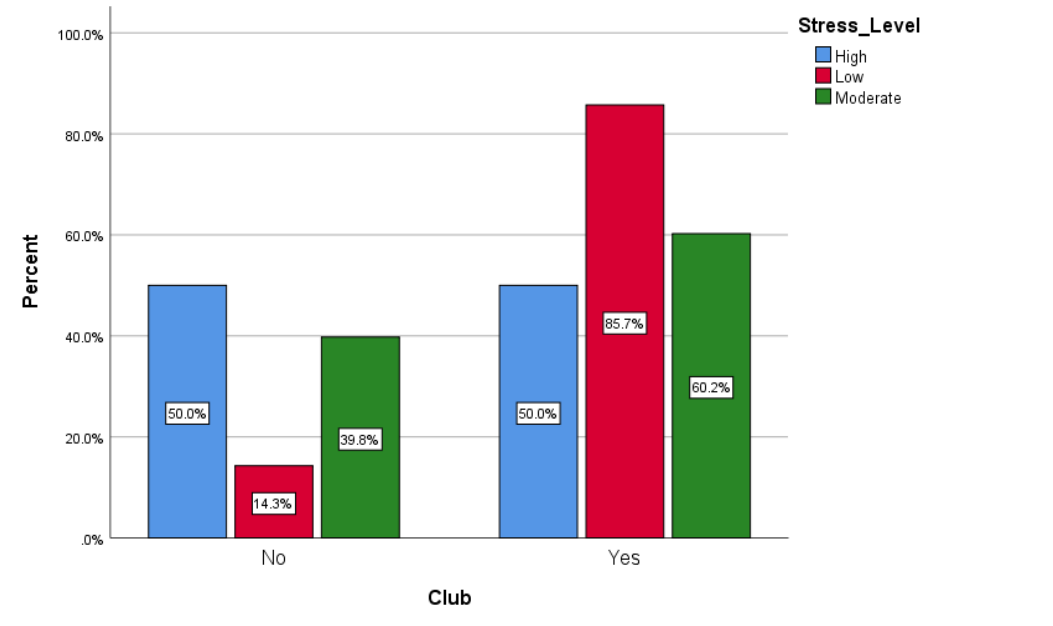


Clubs/Societies

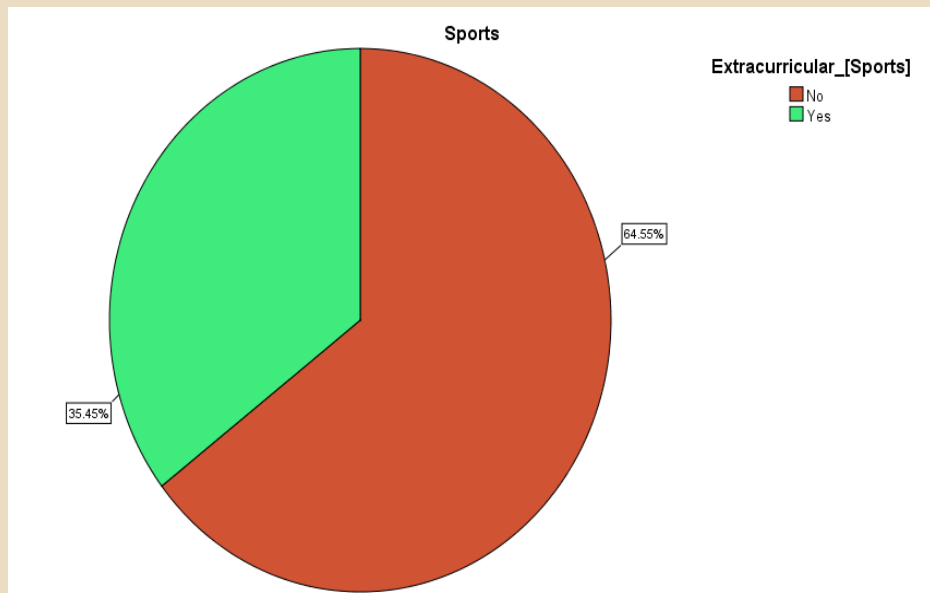


Chi-Square Tests				
	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	2.764 ^a	2	.251	.268
Likelihood Ratio	3.039	2	.219	.253
Fisher's Exact Test	2.598			.268
N of Valid Cases	110			

a. 2 cells (33.3%) have expected count less than 5. The minimum expected count is 2.80.



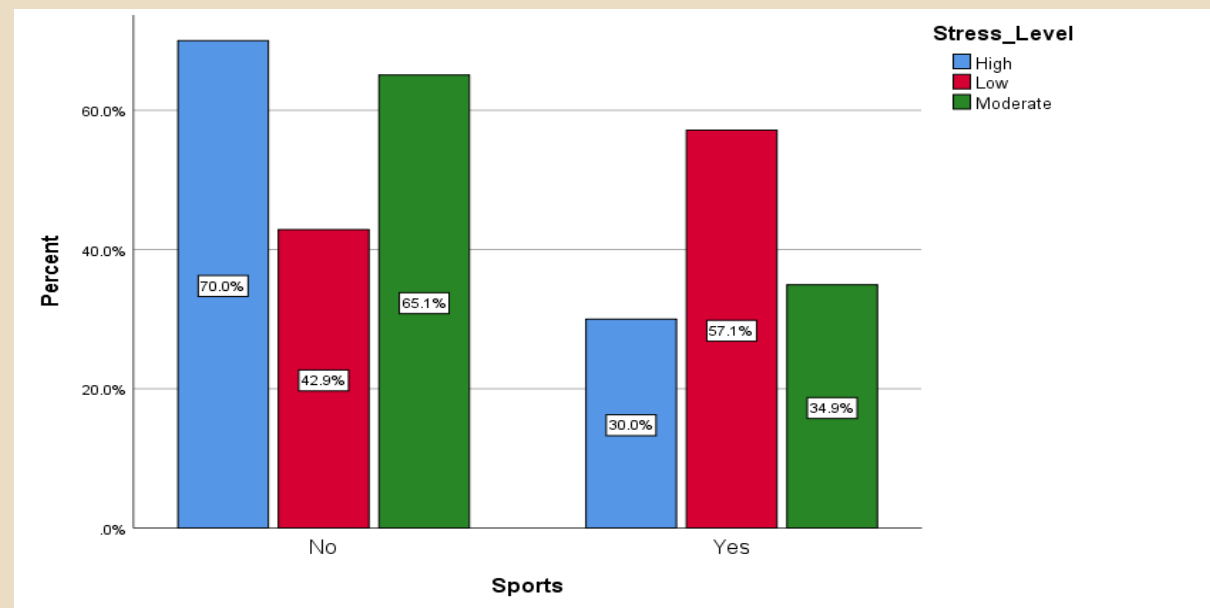
Sports



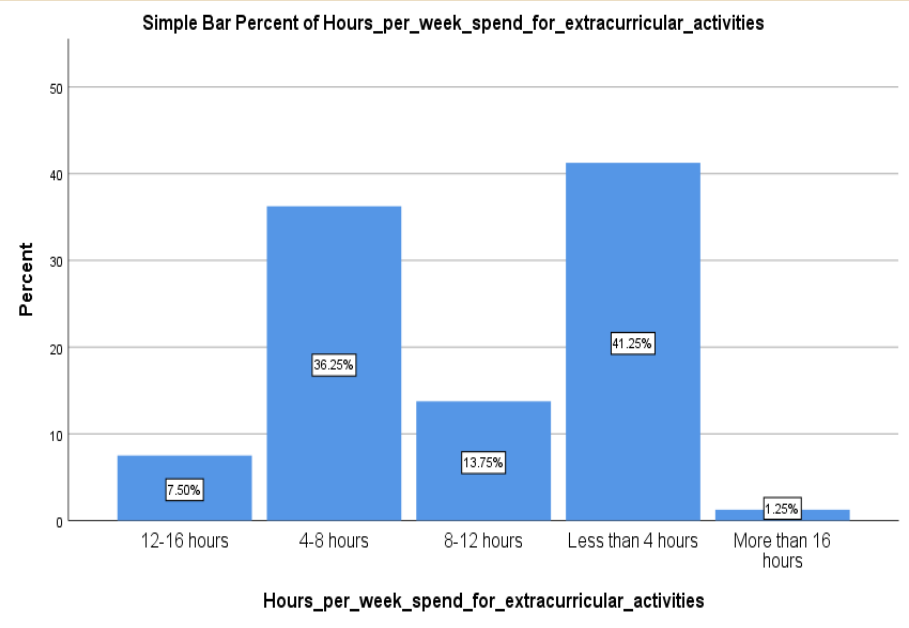
Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	1.708 ^a	2	.426	.431
Likelihood Ratio	1.638	2	.441	.500
Fisher's Exact Test	1.719			.402
N of Valid Cases	110			

a. 2 cells (33.3%) have expected count less than 5. The minimum expected count is 2.48.

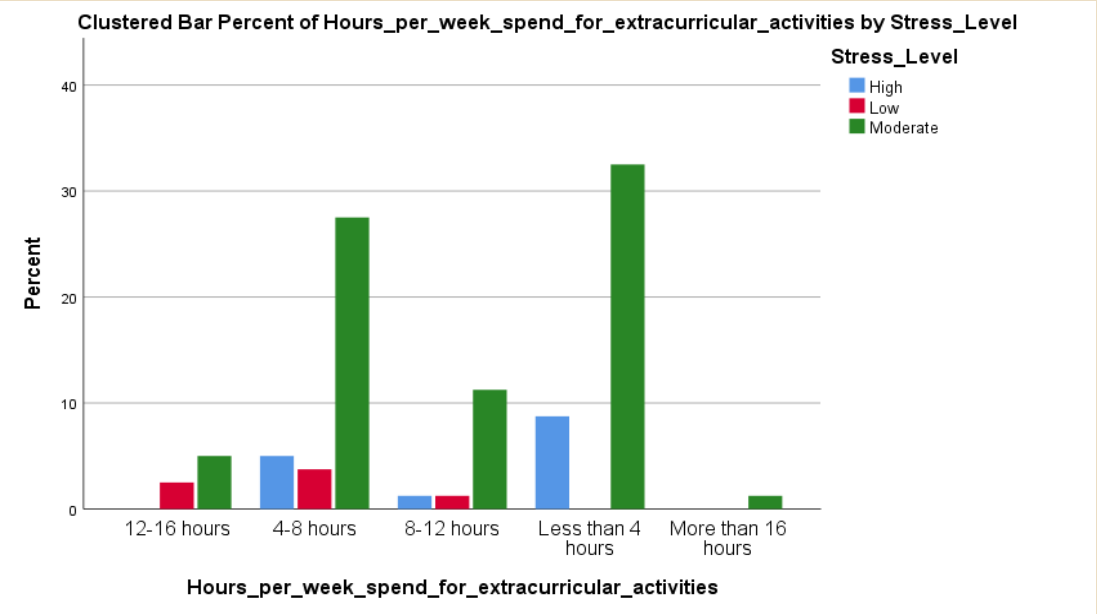


Hours per week spend for extracurricular activities

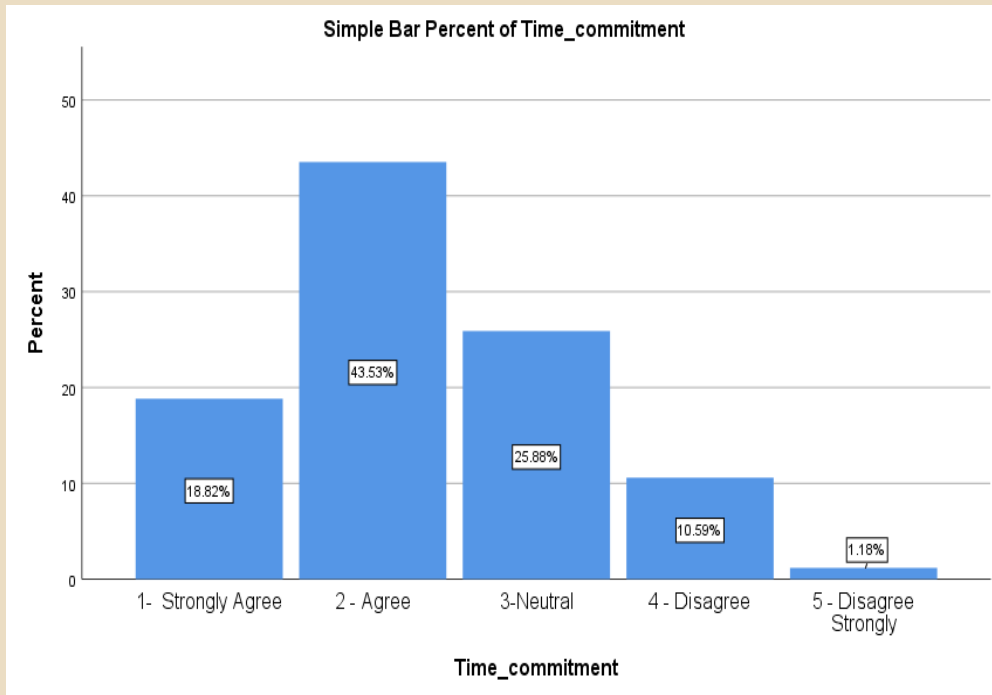


Chi-Square Tests				
			Asymptotic Significance	
	Value	df	(2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	14.108 ^a	10	.168	.182
Likelihood Ratio	14.012	10	.172	.190
Fisher's Exact Test	12.624			.200
N of Valid Cases	110			

a. 11 cells (61.1%) have expected count less than 5. The minimum expected count is .06.

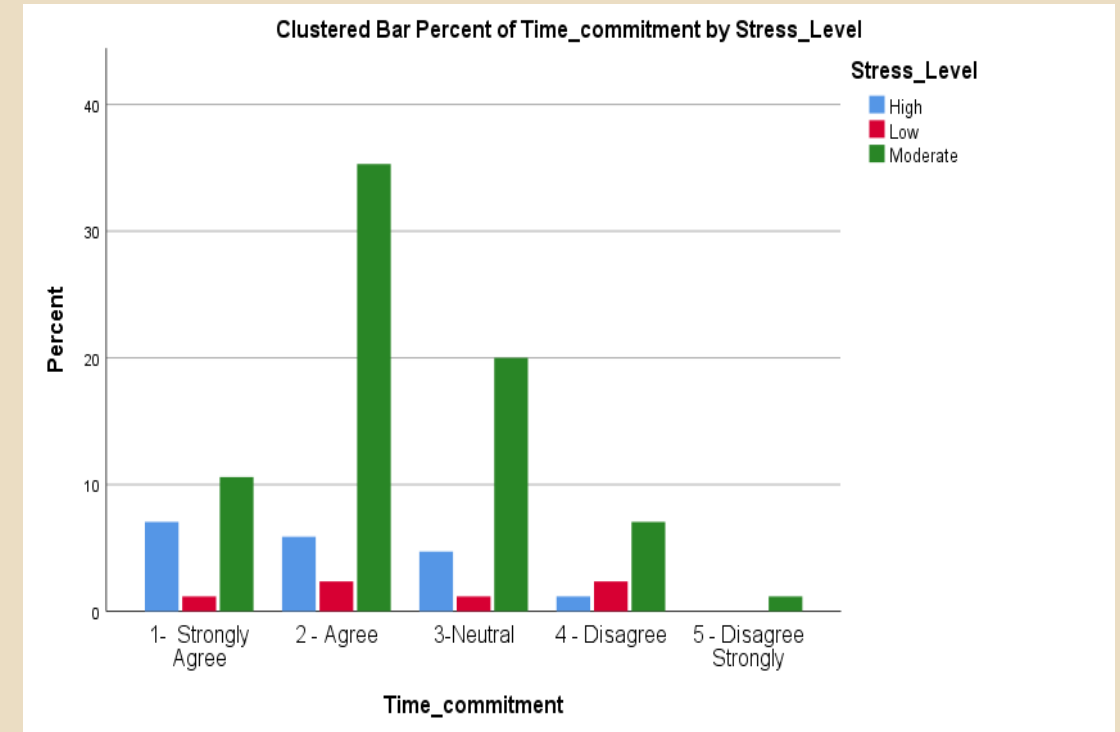


Time Commitment



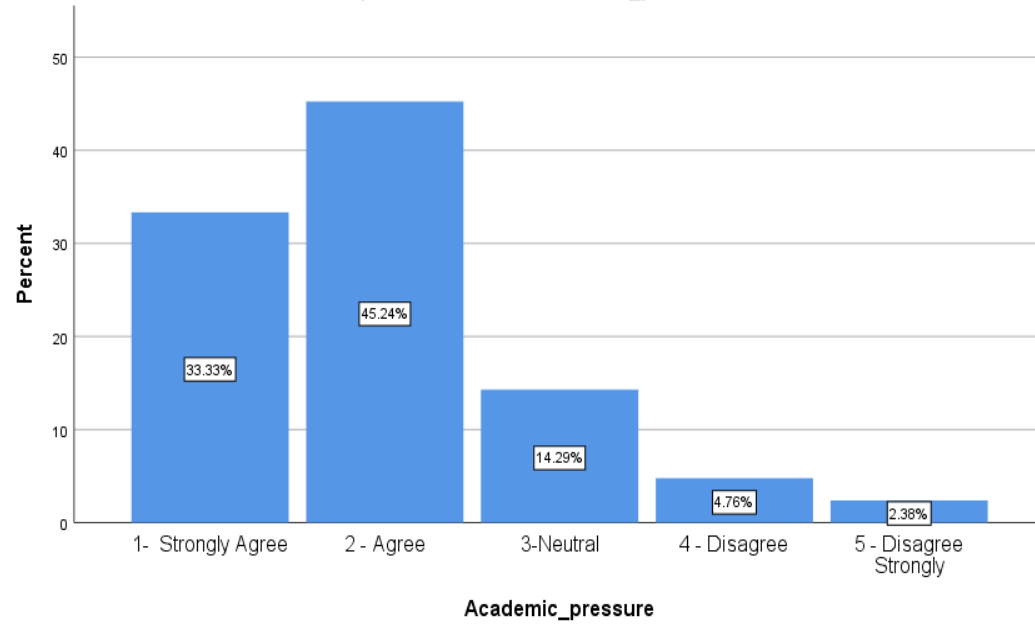
Chi-Square Tests				
	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	9.418 ^a	10	.493	.463
Likelihood Ratio	7.679	10	.660	.719
Fisher's Exact Test	9.504			.494
N of Valid Cases	110			

a. 12 cells (66.7%) have expected count less than 5. The minimum expected count is .06.



□ Academic Pressure

Simple Bar Percent of Academic_pressure

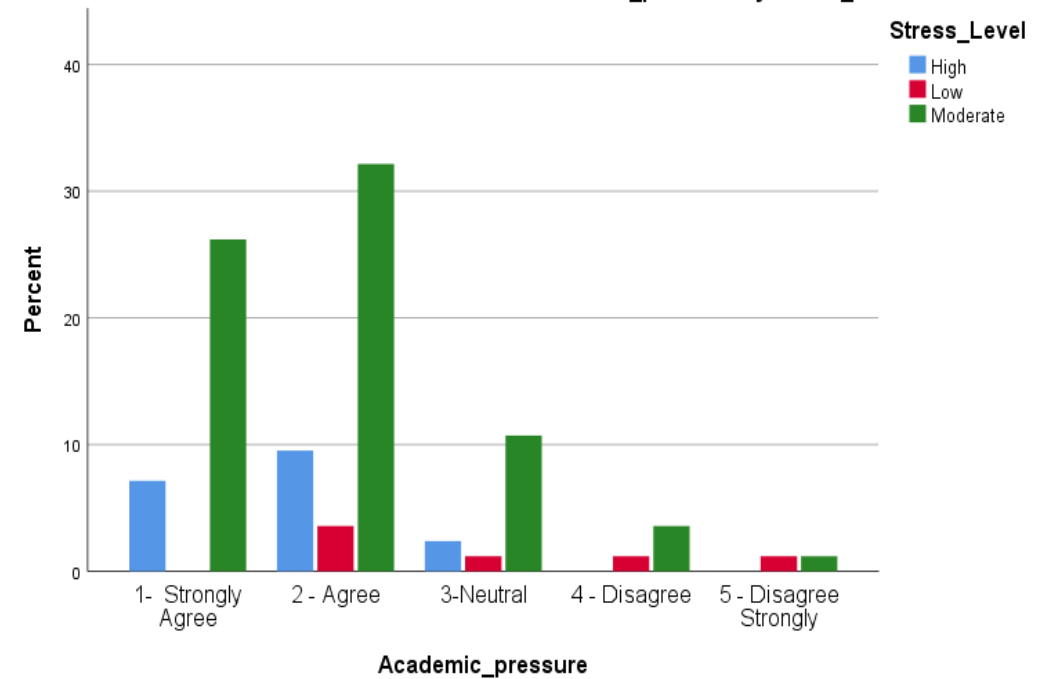


Chi-Square Tests

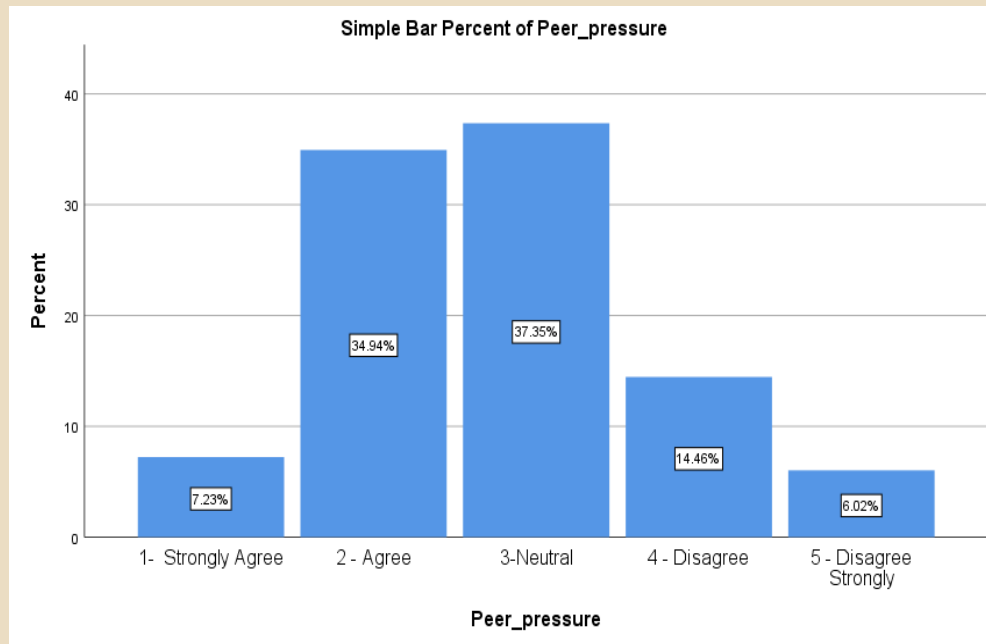
	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	12.377 ^a	10	.261	.264
Likelihood Ratio	10.744	10	.378	.429
Fisher's Exact Test	10.023			.374
N of Valid Cases	110			

a. 12 cells (66.7%) have expected count less than 5. The minimum expected count is .13.

Clustered Bar Percent of Academic_pressure by Stress_Level

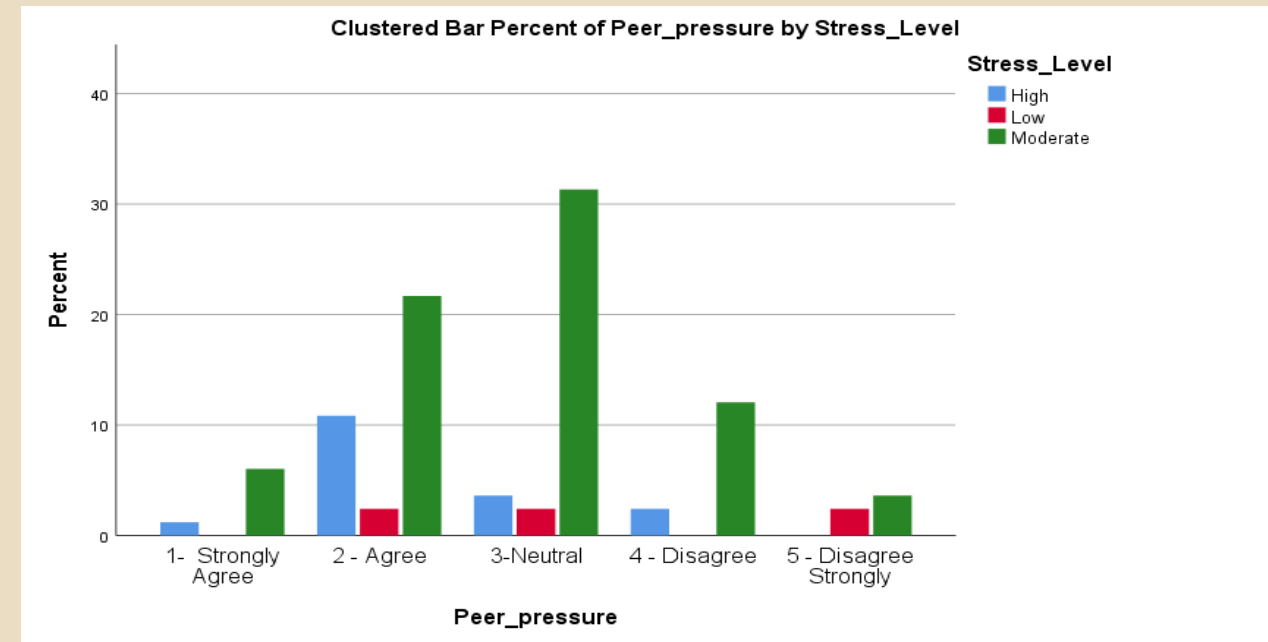


Peer Pressure

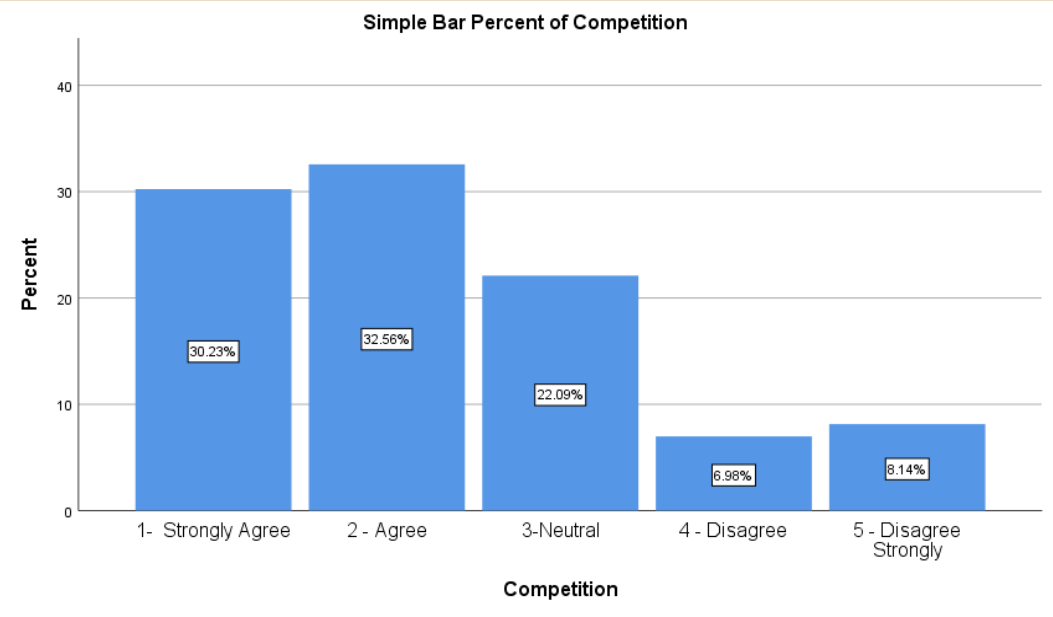


Chi-Square Tests				
	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	16.455 ^a	10	.087	.088
Likelihood Ratio	13.496	10	.197	.265
Fisher's Exact Test	11.126			.247
N of Valid Cases	110			

a. 12 cells (66.7%) have expected count less than 5. The minimum expected count is .32.

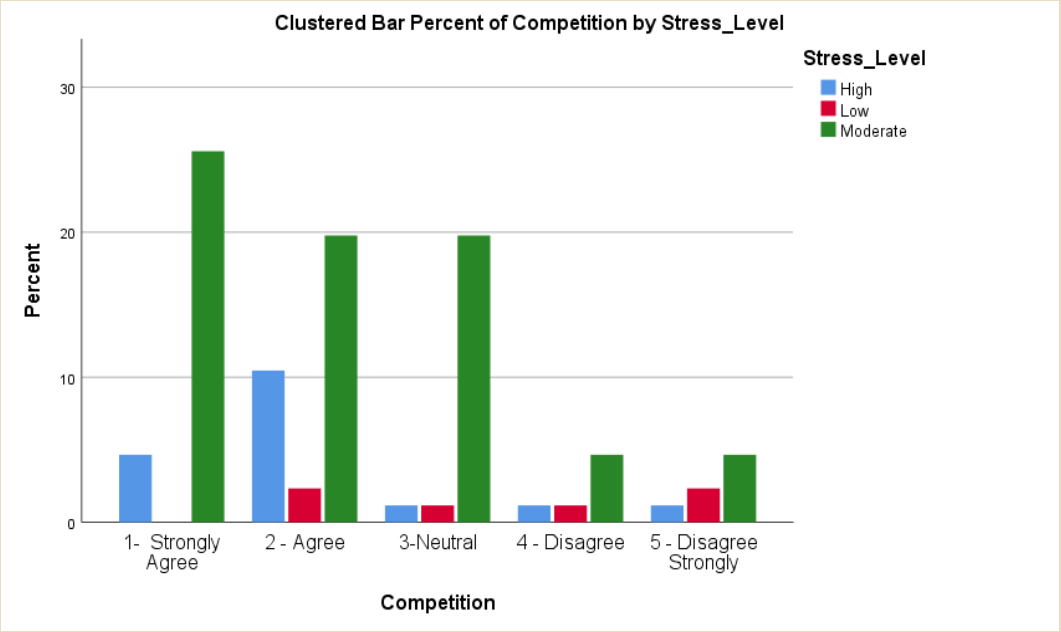


Competition

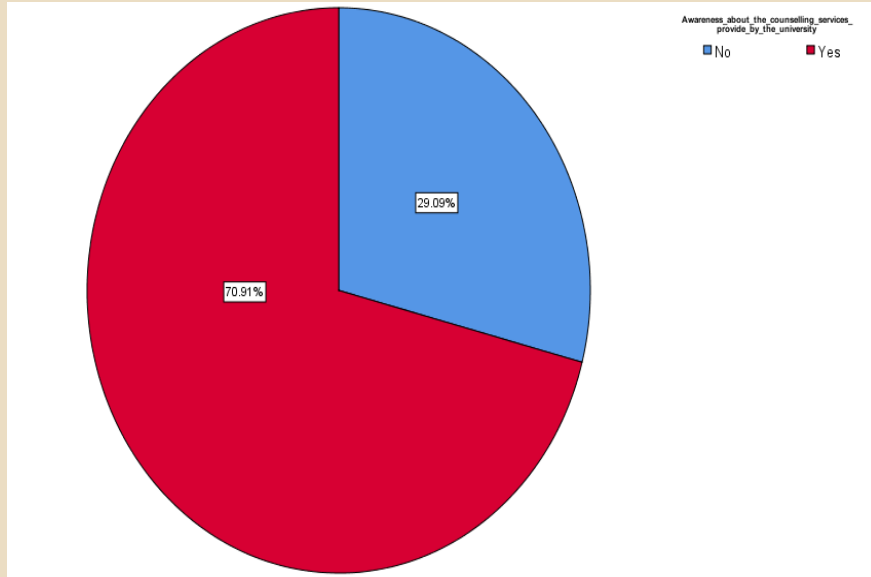


Chi-Square Tests				
	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	15.286 ^a	10	.122	.117
Likelihood Ratio	14.312	10	.159	.225
Fisher's Exact Test	13.646			.105
N of Valid Cases	110			

a. 12 cells (66.7%) have expected count less than 5. The minimum expected count is .38.

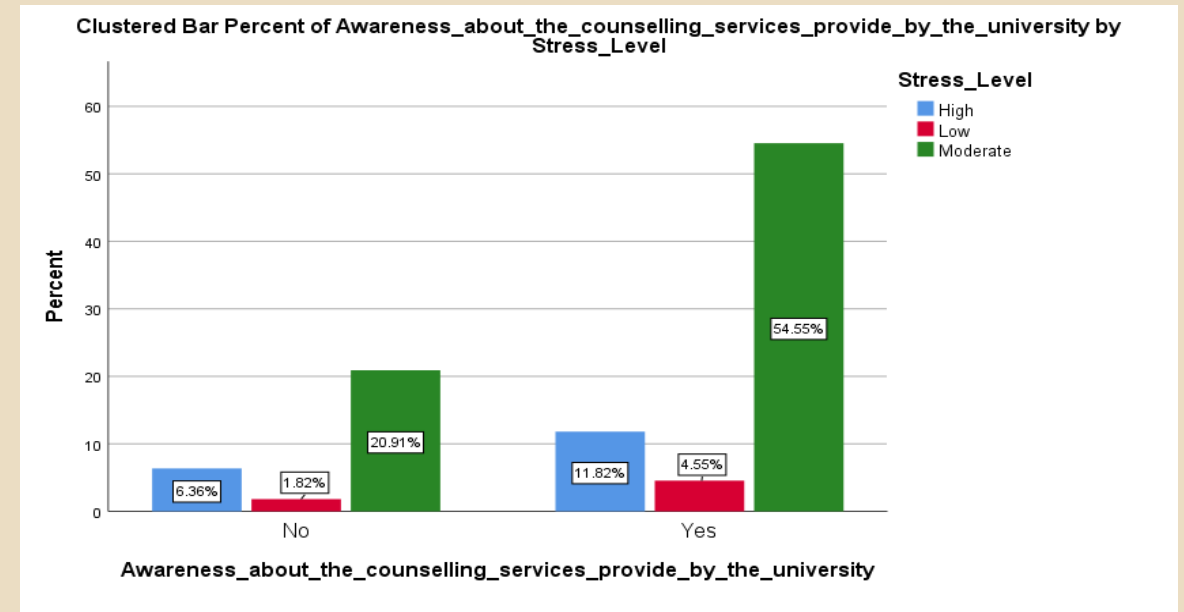


□ Awareness about the counselling services provide by the university

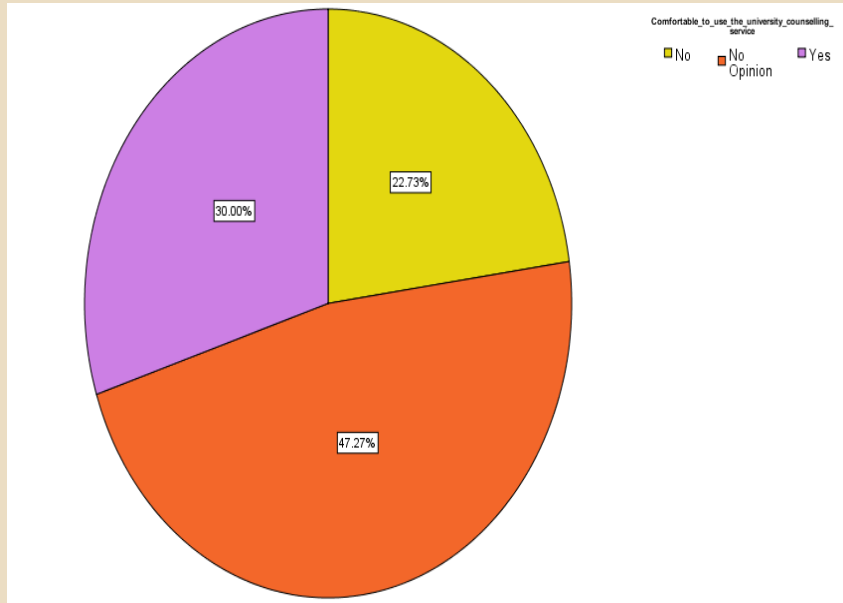


Chi-Square Tests				
	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	.416 ^a	2	.812	.864
Likelihood Ratio	.405	2	.817	.864
Fisher's Exact Test	.585			.864
N of Valid Cases	110			

a. 2 cells (33.3%) have expected count less than 5. The minimum expected count is 2.04.

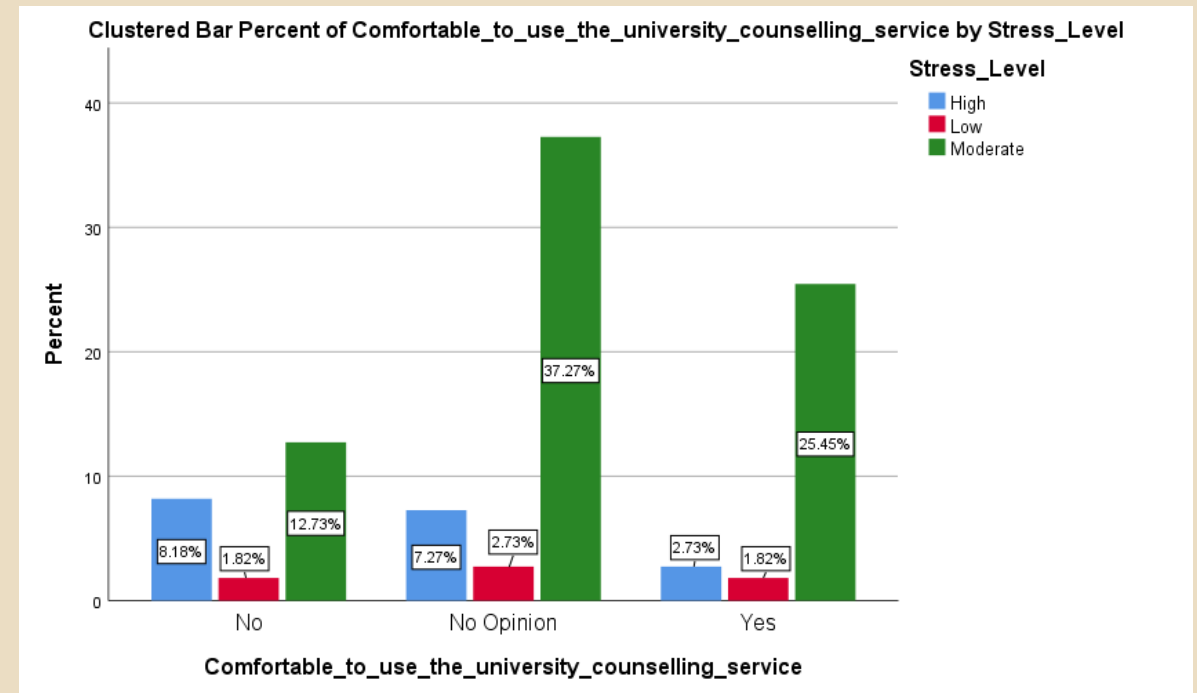


❑ Comfortable to use the university counselling service



Chi-Square Tests				
	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	7.947 ^a	4	.094	.089
Likelihood Ratio	7.423	4	.115	.152
Fisher's Exact Test	7.481			.091
N of Valid Cases	110			

a. 4 cells (44.4%) have expected count less than 5. The minimum expected count is 1.59.



➤ CONCLUSION

- ❖ **Demographic Factors:** No significant association found between stress levels and gender, academic year, or subject stream, suggesting a universal nature of stress among students.
- ❖ **Academic Stress Factors:** Students believe that the frequency of assignments/quizzes per week and intense competition among peers are the primary contributors to their stress.
- ❖ **Lifestyle and Financial Influences:** There is no noteworthy correlation found between the number of hours dedicated to self-study, living arrangements, and employment status in influencing stress levels among students.
- ❖ **Extracurricular Activity and Social Connections:** No significant association between stress levels and club/societies participation, sports participation.
: There is a significant association between having quality conversation with family and stress level of the student
- ❖ **Implications:** To improve overall student well-being, the study offers insights for customized treatments, such as modifications to the academic schedule and mental health resources.
- ❖ **Future Directions:** This research lays the groundwork for future studies and interventions aimed at creating a healthier and more supportive university environment.



❖ References

<https://www.das.nh.gov/wellness/docs/percieved%20stress%20scale.pdf>





THANK YOU !

Any Questions?

